

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



|   |   |   |
|---|---|---|
| Applicant's or agent's file reference<br>NPC4520&4551   | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |   |
| International application No.<br>PCT/JP2002/013345  | International filing date (day/month/year)<br>20 December 2002 (20.12.2002)   | Priority date (day/month/year)<br>28 December 2001 (28.12.2001) |
| International Patent Classification (IPC) or national classification and IPC<br>C08L 23/28, C08F 8/22, C09D 123/28, C09J 123/28 |   |   |
| Applicant<br>NIPPON PAPER INDUSTRIES CO., LTD.  |   |   |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

|   |  |
|---|--|
| Date of submission of the demand<br>25 July 2003 (25.07.2003) | Date of completion of this report<br>17 December 2003 (17.12.2003) |
| Name and mailing address of the IPEA/JP                       | Authorized officer   |
| Facsimile No.   | Telephone No.  |

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

JP2002/013345

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

☒ the international application as originally filed☐ the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, as amended (together with any statement under Article 19

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☐ The amendments have resulted in the cancellation of:☐ the description, pages \_\_\_\_\_☐ the claims, Nos. \_\_\_\_\_☐ the drawings, sheets/fig \_\_\_\_\_5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

T/JP02/13345

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

|                               |        |      |     |
|-------------------------------|--------|------|-----|
| Novelty (N)                   | Claims | 1-10 | YES |
|                               | Claims |      | NO  |
| Inventive step (IS)           | Claims |      | YES |
|                               | Claims | 1-10 | NO  |
| Industrial applicability (IA) | Claims | 1-10 | YES |
|                               | Claims |      | NO  |

### 2. Citations and explanations

#### 1. Documents

The following documents are described in the ISR

- Document 1: JP, 2001-114961, A (Nippon Paper Industries, Inc.), 24 April, 2001, Entire specification (Family: none).
- Document 2: JP, 11-315185, A (Nippon Paper Industries, Inc.), 16 November 1999, Entire specification & JP, 3045498, B2, & WO, 00/42103, A1, & EP, 1065245, A1.
- Document 3: JP, 11-302324, A (Daiso Co., Ltd.), 02 November, 1999, Entire specification (Family: none).

#### 2. Novelty

The "binder resin composition" described in claims 1-10 is characterized in that it comprises a specific chlorinated propylene random copolymer, a stabilizer, and an organic solvent as necessary components. None of the documents described in the ISR describes a binder resin composition comprising those three components as necessary components, nor is compounding those three components a matter obvious to a person skilled in the art. Therefore, the inventions described in claims 1-10 appear to possess novelty.

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of Box V:

## 3. Inventive step

Documents 1, 2 describe a binder resin composition comprising a carboxyl group-containing chlorinated syndiotactic polyolefin, an organic solvent, and a stabilizer. Further, they describe the manufacture of a syndiotactic polyolefin of a starting material by using a metallocene catalyst (document 1, Claims, par. No. [0031]).

Documents 1, 2 do not describe using propylene- $\alpha$ -olefin random copolymer. However, because propylene- $\alpha$ -olefin random copolymer may be admixed to the syndiotactic polyolefin (document 1, par. [0011], [0012]), a person skilled in the art can easily conceive the usage of a syndiotactic propylene- $\alpha$ -olefin random copolymer in which a small amount of  $\alpha$ -olefin was copolymerized.

Therefore, the inventions of claims 2-10 could have been easily conceived by a person skilled in the art based on the inventions described in documents 1, 2.

Document 3 describes that a chlorinated polyolefin obtained by chlorinating a starting material polyolefin selected from ethylene polymerized with a metallocene polymerization catalyst, a homopolymer of 1-olefin containing 3-8 carbon atoms or a copolymer of ethylene with 1-olefin containing 3-8 carbon atoms is dissolved in a solvent and the solution is used for inks, paints, and adhesives (document 3, Claims, par. Nos. [0001], [0025]).

Document 2 does not describe a stabilizer. However, a person skilled in the art could have easily conceived that it is desirable to blend a stabilizer when chlorinated polyolefins are used for inks, paints, and adhesives.

Therefore, the inventions of claims 1-10 could have been easily conceived by a person skilled in the art based on the inventions described in documents 1, 2.

Accordingly, the inventions of claims 1-10 do not appear to involve an inventive step.